

WE CLAIM:

1. A computer-implemented method for displaying a handwriting guide for a free form document editor via a display wherein the handwriting guide includes at least one of an active writing guide and an inactive writing guide into which a user inputs electronic ink, the method comprising:

creating an outline object having at least one line for receiving inputs of electronic ink and encompassing at least one of the inactive writing guide and the active writing guide; and

in response to the at least one line within the outline object being currently active to receive inputs of the electronic ink, displaying the active writing guide around the at least one line thereby indicating a location of a current active context.

2. The method of claim 1, wherein displaying the active writing guide comprises displaying at least one bracket defining a writing area currently active to receive inputs of electronic ink.

3. The method of claim 1, further comprising at least one of distinguishing a display of the outline object from any region not occupied by the outline object and in response to receiving more electronic ink within the at least one line, expanding the active writing guide up to a maximum width of the outline object.

4. The method of claim 3, wherein distinguishing the display of the outline object comprises displaying the outline object as a shaded region distinguished from any region not occupied by the outline object on the display.

5. The method of claim 3, further comprising  
receiving inputs of electronic ink on a different line within the outline object other than the at least one line; and

in response to receiving the inputs on the different line, moving the active writing guide from around the at least one line to be displayed around the different line.

6. The method of claim 4, wherein displaying the outline object includes displaying at least one empty line displayed for receiving electronic ink.

7. The method of claim 5, further comprising in response to the different line beginning a new paragraph, expanding the outline object to include at least one empty line beyond lines containing electronic ink.

8. The method of claim 3, wherein the inactive writing guide comprises the outline object displayed and not occupied by the active writing guide, further comprising:

in response to any line within the outline object not being filled with electronic ink, displaying an extension on the end of the any line within the outline object, wherein when inputs of electronic ink are received into the extension, the electronic ink received is displayed within the outline object as part of the any line.

9. The method of claim 8, further comprising determining and displaying a width of the extension based on a height of the any line.

10. The method of claim 8, further comprising:

receiving inputs of electronic ink within any region not occupied by the outline object; and

in response to receiving the inputs of electronic ink within the region not occupied by the outline object, creating a new outline object.

11. The method of claim 10, further comprising:
  - in response to not receiving inputs of electronic ink into the extension and receiving inputs of electronic ink into the region not occupied by the outline object, displaying the extension within the new outline object created.
12. The method of claim 8, further comprising upon receiving the inputs into the extension, moving the active writing guide to be displayed around the line having the extension and receiving the inputs.
13. The method of claim 8, further comprising in response to receiving an indent on any line within the outline object displaying the indent as a region not occupied by the outline object.
14. The method of claim 1, further comprising:
  - transitioning from a pen mode for receiving electronic ink to a text mode for receiving text characters; and
  - in response to transitioning from a pen mode to a text mode, displaying an insertion point of the text mode at the end of any line around which the active writing guide was last displayed prior to the transition.
15. The method of claim 1, further comprising:
  - transitioning from a text mode for receiving text characters to a pen mode for receiving electronic ink;
  - in response to transitioning from the text mode to the pen mode, displaying the active writing guide of the pen mode around the at least one line wherein the at least one line comprises a line in which an insertion point was last displayed prior to the transition and wherein commands applied to the insertion point are also applied to electronic ink within the active writing guide without selecting the electronic ink within the active writing guide; and
  - in response to a non-insertion point selection being active when transitioning from text mode to pen mode, not displaying the active writing guide.

16. The method of claim 5, wherein moving the active writing guide to be displayed around the different line comprises displaying the active writing guide around the different line at a current maximum width of the outline object and wherein the current maximum width of the outline object is based on at least one of the following:

a longest line of electronic ink displayed within the outline object;

an initial minimal width; and

another object outside the outline object preventing the current maximum width from expanding.

17. A computer-controlled apparatus capable of performing the method of claim 1.

18. A computer-readable medium comprising computer executable instructions which, when executed by a computer, cause the computer to perform the method of claim 1.

19. In a computing system having a graphical user interface including a display and a user interface input device, the display having rendered thereon a writing guide for displaying at least one of a handwriting guide and a drawing guide for a free form document editor, the writing guide comprising:

the handwriting guide including at least one of an active writing guide and an inactive writing guide into which a user inputs electronic ink and an outline object having at least one line for receiving inputs of electronic ink and encompassing at least one of the inactive writing guide and the active writing guide;

wherein the computing system is operative to:

display the active writing guide around the at least one line in response to the at least one line being currently active to receive inputs of the electronic ink, thereby indicating a location of a current active context; and

expand the active writing guide up to a maximum width of the outline object in response to receiving more electronic ink within the at least one line.

20. The computing system of claim 19, wherein the active writing guide comprises at least one bracket defining a writing area currently active to receive inputs of electronic ink.

21. The computing system of claim 19, further operative to distinguish a display of the outline object from any region not occupied by the outline object.

22. The computing system of claim 21, wherein the display of the outline object distinguished comprises a shaded region distinguished from any region on the display not occupied by the outline object.

23. The computing system of claim 21, further operative to:  
receive inputs of electronic ink on a different line within the outline object other than the at least one line; and  
in response to receiving the inputs on the different line, move the active writing guide from around the at least one line to be displayed around the different line.

24. The computing system of claim 21, wherein the inactive writing guide comprises segments of the outline object displayed but not occupied by the active writing guide, the computing system further operative to:

in response to any line within the outline object not being filled with electronic ink, display an extension on the end of the any line within the outline object; and

in response to inputs of electronic ink being received into the extension, display the electronic ink received object as part of the any line within the outline object.

25. The computing system of claim 24, further operative to determine and display a width of the extension based on a height of the any line.
26. The computing system of claim 24, further operative to:
  - receive inputs of electronic ink within any region not occupied by the outline object;
  - in response to receiving the inputs of electronic ink within the region not occupied by the outline object, create a new outline object; and
  - in response to not receiving inputs of electronic ink into the extension and receiving inputs of electronic ink into the region not occupied by the outline object, display the extension within the new outline object created.
27. The computing system of claim 24, further operative to move the active writing guide to be displayed around the line having the extension upon receiving the inputs into the extension.
28. The computing system of claim 24, further operative to display an indent as a region not occupied by the outline object in response to receiving the indent on any line within the outline object.
29. The computing system of claim 19, further operative to:
  - transition from a pen mode for receiving electronic ink to a text mode for receiving text characters; and
  - in response to transitioning from a pen mode to a text mode, display an insertion point of the text mode at the end of any line around which the active writing guide was last displayed prior to the transition.
30. The computing system of claim 19, further operative to:
  - transition from a text mode for receiving text characters to a pen mode for receiving electronic ink;

in response to transitioning from the text mode to the pen mode, display the active writing guide of the pen mode around the at least one line wherein the at least one line comprises a line in which an insertion point was last displayed prior to the transition and wherein commands applied to the insertion point are also applied to the active writing guide without selecting the active writing guide; and

not display the active writing guide in response to a non-insertion point selection being active when transitioning from text mode to pen mode.

31. The computing system of claim 23, wherein the active writing guide displayed around the different line is displayed at a current maximum width of the outline object and wherein the current maximum width of the outline object is based on at least one of the following:

a longest line of electronic ink displayed within the outline object;  
an initial minimal width; and  
another object outside the outline object preventing the current maximum width from expanding.

32. The computing system of claim 19, wherein the writing guide further comprises:

the drawing guide having at least one of an active drawing guide and an inactive drawing guide into which a user inputs electronic ink wherein the active drawing guide comprises a bounding rectangle encompassing a drawing area that includes existing electronic ink; and

wherein the computing system is operative to:

display the active drawing guide as the bounding rectangle in response to the bounding rectangle being currently active to receive inputs of the electronic ink, thereby indicating a location of a current active context; and

expand the active drawing guide up to a maximum area of the display in response to detecting new electronic ink within the drawing guide.

33. The computing system of claim 32, wherein the inactive drawing guide comprises one of a zone comprising a fixed boundary around the active writing guide the fixed boundary providing additional space for the user to input new electronic ink and a zone comprising a buffer around each input of electronic ink each buffer providing additional space for the user to input new electronic ink.

34. The computing system of claim 32, wherein the active drawing guide comprises a dashed line displayed on at least two sides of the bounding rectangle defining boundaries of a drawing area currently active to receive inputs of electronic ink.

35. The computing system of claim 32, further operative to distinguish a display of the drawing guide from any region not occupied by the drawing guide.

36. The computing system of claim 35, wherein the display of the drawing guide distinguished comprises a shaded region distinguished from any region on the display not occupied by the drawing guide.

37. The computing system of claim 33, further operative to:  
receive inputs of new electronic ink within the inactive writing guide;  
and  
in response to receiving the inputs, expanding the active drawing guide to encompass the new electronic ink.

38. The computing system of claim 32, further operative to:  
store a last position of at least one of an insertion point displayed within a text mode and the active writing guide; and  
transition from the drawing guide to the text mode.

39. The computing system of claim 38, wherein the computing system transitions from the drawing guide to the text mode in response to receiving a typed character, the computing system further operative to:

in response to transitioning from the drawing guide to the text mode, insert the typed character in the last position of one of the insertion point and the active writing guide.

40. A computer-implemented method for displaying a drawing guide for a free form document editor wherein the drawing guide includes at least one of an active drawing guide and an inactive drawing guide into which a user inputs ink strokes, the method comprising:

in response to transitioning to the drawing guide, distinguishing a display of the drawing guide from any region not occupied by the drawing guide; and

in response to detecting ink strokes within the drawing guide, displaying the active drawing guide comprising a bounding rectangle encompassing a drawing area that includes the ink strokes detected.

41. The method of claim 40, wherein the inactive drawing guide comprises a zone around the active writing guide the zone providing additional space for the user to input new ink strokes, the method further comprising:

receiving inputs of new ink strokes within the inactive writing guide; and

in response to receiving the inputs, expanding the active drawing guide to encompass the new ink strokes.

42. The method of claim 40, wherein distinguishing the display of the drawing guide comprises displaying a shaded region distinguished from any region not occupied by the drawing guide and wherein the method further comprises:

in response to receiving input of an ink stroke in any region not occupied by the drawing guide, creating a new drawing guide.

43. The method of claim 40, further comprising:

storing a last position of an insertion point displayed within a text mode;

transitioning from the drawing guide to the text mode in response to receiving a typed character within the drawing guide displayed; and

in response to transitioning from the drawing guide to the text mode, inserting the typed character in the last position of the insertion point.

44. A computer-readable medium comprising computer executable instructions which, when executed by a computer, cause the computer to perform the method of claim 40.